

# [LED DEVICE ]

## Abstract

An LED device is described, including a substrate, a first doped layer of a first conductivity type, a light emitting layer, a second doped layer of a second conductivity, and two electrodes. The first doped layer is disposed on the substrate, the light emitting layer is disposed on a portion of the first doped layer, and the second doped layer is disposed on the light emitting layer. The first and the second doped layers and the light emitting layer together constitute an active layer. The active layer has rough sidewalls capable of preventing total reflection of the side light incident thereto. The two electrodes are disposed on the first doped layer and the second doped layer, respectively.